AMENDMENTS TO THE CLAIMS

- 1. (Currently Amended) A blood purification device comprising: [[;]]
- a blood circuit having an arterial blood circuit and a venous blood circuit;
- a blood pump disposed in said arterial blood circuit;
- a blood purifier connected to the blood circuit between said arterial blood circuit and said venous blood circuit, and purifies the configured to purify blood flowing in said blood circuit;
- a first measuring [[means]] <u>unit</u> disposed in said arterial blood circuit for measuring the <u>and</u> configured to measure <u>a</u> blood concentration of said arterial blood circuit;

[[to]] a second measuring means that is unit disposed in said venous blood circuit for measuring and configured to measure a blood concentration of said venous blood circuit;

a calculating means that calculates unit configured to calculate a measurement value and a theoretical value, the measurement value referring to a ratio of said blood concentrations measured by said first measuring [[means]] unit and said second measuring [[means]] unit, and the theoretical value referring to a blood concentration ratio as a theoretical value obtained by designated at least one formula [[using]] based on parameters including a preset blood flow rate of [[a]] said blood pump and [[said]] a preset blood purifying rate of said blood purifier as parameters; and

an evaluation means, for evaluating unit configured to evaluate whether said blood eoncentration ratio obtained from said calculating means as a measurement value and said blood concentration ratio as a theoretical value are approximately equal, wherein

said calculating unit performs a calculation in response to a result of evaluation by said evaluation unit to determine a performance of at least one of said blood pump and said blood purifier using said at least one formula.

Application No. 10/713,772 Docket No.: 09496/0200199-US0

Amendment dated August 25, 2006 Reply to Office Action of May 25, 2006

2. (Currently Amended) The blood purifying means purification device of claim 1,

wherein: comprising;

said [[a]] blood purifier includes connected between said arterial blood circuit and said

venous blood circuit; and a water removing [[means]] unit connected to said blood purifier for

removing and configured to remove water from [[the]] blood flowing in said blood purifier; and

said preset blood purifying rate [[which]] is the same as said a preset water removal rate of

said water removing [[means]] unit.

3. (Currently Amended) The blood purification device of claim 2, further comprising: [[;]]

a substitution fluid supplying means disposed unit configured to supply a substitution fluid

into said blood circuit, wherein [[;]]

said [[a]] calculating means for calculating said unit configured to calculate a theoretical

value referring to a ratio of the blood concentrations calculated as a theoretical value obtained by

the designated at least one formula using said <u>based on parameters including a preset</u> substitution

fluid supplying rate preset for of said substitution fluid supplying [[means]] unit and a filtration rate

[[for]] of said blood purifier in addition to said preset blood flow rate and said preset water removal

rate as parameters.

4. (Currently Amended) The blood purification device of the claim 1, further comprising:

[[;]]

a reporting means for reporting said unit configured to report when a ratio difference

between said blood concentration as a measurement value and said blood concentration as the

- 3 -

Application No. 10/713,772 Docket No.: 09496/0200199-US0 Amendment dated August 25, 2006

Reply to Office Action of May 25, 2006

theoretical value, which is evaluated by said evaluation unit, is bigger larger than the designated

acceptable number by said evaluation means a predetermined acceptable ratio difference.

5. (Currently Amended) The blood purification device of the claim 2, further comprising:

[[;]]

a reporting means for reporting said unit configured to report when a ratio difference

between said blood concentration as a measurement value and said blood concentration as the

theoretical value, which is evaluated by said evaluation unit, is bigger larger than the designated

acceptable number by said evaluation means a predetermined acceptable ratio difference.

6. (Currently Amended) The blood purification device of the claim 3, further comprising:

[[;]]

a reporting means for reporting said unit configured to report when a ratio difference

between said blood concentration as a measurement value and said blood concentration as the

theoretical value, which is evaluated by said evaluation unit, is bigger larger than the designated

acceptable number by said evaluation means a predetermined acceptable ratio difference.

7. (Canceled)

- 4